

Applicant: Kim et al.
Serial No. 10/083,083
Filed: February 26, 2003
Office Action Date: March 6, 2003
Date: June 6, 2003

In the Specification:

Please amend the abstract as follows:

-- A supplemental restraint system that is easy to use ~~and provides superior protection in an a~~ vehicle is provided. The user of the system is prevented from the damaging effects of being restrained by a shoulder seat belt combination that provides inadequate support to most of the body and can produce injury at the point of contact with the body during an accident. Further, the supplemental restraint system of the present invention provides the user with a harness to better hold the user to the seat and restraint system of the vehicle. The present invention provides a means of dressing an adult or a child in a restraint harness that may be easily attached within a vehicle and provides the user with restraints that fit the user's height and weight requirements.--

Please amend paragraph 0022 as follows:

--The present invention provides a seat belt and supplemental ~~restrain-restraint~~ system that includes a number of harness belts, forming, in a preferred embodiment, a five-point harness system, or bars and straps that keep a passenger in his seat and which can include a number of air bags, in association with the harness belts, bars and straps, such that one or more air bags will, upon vehicle impact, inflate upon and about the passenger rather than towards the passenger. In the preferred embodiment of the present invention, means to attach a restraint harness system or a jacket to the automobile seat are provided. The passenger may be seated within the harness system or jacket and, thus, be provided with a number of belts and/or bars and surrounding air bags, such that injury will be prevented by keeping the passenger in his seat and providing cushioning air bags to surround and protect the passenger. It is to be understood that the restraint system of the present invention may be provided with crash detection sensing devices and may be

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N connected to the vehicle in such a fashion as to utilize crash sensors present in the vehicle and/or which are well known to persons having skill in the art.—

Please amend paragraph 0026 as follows:

B-- When air bags deploy, the speed and direction of the air bag is directly in the reverse direction of travel of the vehicle and the passengers. Accordingly, the impact of the passenger and air bag will be at a velocity that can be derived based on the velocity of the vehicle, its deceleration due to the impact, and the weight of the passenger in an additive manner. ~~on a passenger will be the sum of the speed of the vehicle at the moment of impact and the speed of the air bag as it deploys towards the passenger.~~ For example, if the vehicle is traveling at approximately 50 kilometers per hour forward and the air bag deploys at approximately 30 kilometers per hour towards the passenger, then the passenger will feel an impact equal to an approximately 80 kilometer per hour impact. In the present invention, the moving speed and direction of passengers will be almost the same as the moving direction of the air bag deployed, thereby giving the passenger an almost zero extra impact from the air bag deployment.--

Please add a new paragraph after original paragraph 0042 as follows:

AK--Figure 14a is a perspective view of various accessories for use with the supplemental restraint system of Figure 11.--

Please add a new paragraph after original paragraph 0043 as follows:

GJ--Figure 15a is a perspective view of various accessories for use with the supplemental restraint system of Figure 11.--

Please amend paragraph 0050 as follows:

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--Referring now to Figures 11-15, another embodiment of the supplemental restraint system of the present invention, comprising a harness 190, is shown. In the present embodiment, a series of belts 200a – 200g, of the type used to make seatbelts are used to form harness 190 for use about a person. As shown in Figure 11, a first belt 202 and a second belt 204 are placed in a relative vertical orientation. Belts 202 and 204 are of a sufficient length such that they can reach from the front waist height of a user to the rear waist height of the user, passing over the user's shoulders, in a manner similar to that of a pair of suspenders or brace. In a preferred embodiment, the front portion of belts 202 and 204 are generally parallel to each other and the rear portions cross one over the other such that the rear portions forms an "X". It will be understood by persons having skill in the art that a different configuration of belts 202 and 204, including a configuration where the belts remain parallel in front and back, can be made without departing from the novel scope of the present invention. A third belt 206 is placed in a relative horizontal orientation relative to belts 202 and 204. As will be understood by persons having skill in the art, third belt 206 is attachable to belts 202 and 204 in manners well known in the art, such as by stitching, rivets, adhesives, combinations of these or other manners known to persons having skill in the art. Belt 206 comprises a first end 206a having a female lock receptor 207, a second end 206b having a male lock portion 209, an outside surface 206c and an inside surface 206d. Belt 206 is further provided with supplemental belt segments 208 and 210, which are attached to belt 206. Belt segment 208 is attached to the inside surface 206c near first belt end 206a and belt segment 210 is attached to the outside surface 206d near second belt end 206b. Belt segment 208 comprises a free end 208a having a male lock portion 208b and belt segment 210 comprises a free end 210a having a female lock receptor 210b. It will be seen that the attached combination of belt 206 and belt segments 208 and 210 are of a sufficient length to exceed the circumference of the user's waist. It will be understood by persons having skill in the art that means to expand and contract the length of each of belts 202, 204 and 206 can be provided, in a manner well known in the art, such that the series of belts 200 is completely adjustable to the height and girth of any user.--